

**0913: POST-OPERATIVE STEROIDS IN THE MANAGEMENT OF CAPSULITIS FOLLOWING TMJ ARTHROSCOPY**

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TMJ arthroscopy and arthrocentesis are used in the management of patients who fail to respond to conservative management of TMJ related pain. Around 20% of patients have been found to get clinical improvement initially but subsequently develop marked pain over the joint capsule. In these cases, an intra-articular injection of triamcinolone with marcaine is used to control the pain. This presentation demonstrates the outcome of this management in terms of changes in mouth opening (mm interincisal distance with callipers) and pain (10cm analogue).

Patients presenting 6 weeks following arthroscopy with acute joint related tenderness had pain score and mouth opening measured. They had a 2ml injection containing 40mg triamcinolone with 1ml of 0.5% bupivacaine injected into the joint and reassessed 6 weeks later.

Pain scores improved significantly from an average pain score of 32.8 to 17.3. Mouth opening also improved for the majority by 3mm. 59% improved sufficiently for discharge without further management. 9% subsequently required an open joint procedure

This study confirms the therapeutic benefit of intra-articular steroids in the management of post-operative capsulitis in a limited number of cases. It also suggests that the routine use of intra-operative steroids may not be necessary in 40% of cases.

**1156: LATE ONSET TITANIUM CRANIOPLASTY INFECTION CAUSED BY STAPHYLOCOCCUS BIOFILM**

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**Aims:** The role of bacteria growing on biofilms in implant related infection is increasingly reported within the orthopaedic literature.

We report on a male patient who presented with a delayed (4 years) titanium cranioplasty infection following trauma to the head as a result of poor vision due to underlying hemianopia. His previous 3 attempts at other units ended in MRSA infection and plate removal. We investigate the role of biofilm as a possible cause for this recurrent infection and look at the current techniques to prevent biofilm formation.

**Methods:** We reviewed the microbiological investigations, images history of our case patient. Furthermore, we undertook a literature review of Embase and Pubmed using the key words: Titanium, cranioplasty, delayed infection and biofilm.

**Results:** Patients with a history of previous MRSA infection of a cranioplasty plate, are at risk of recurrent infection several years post-operatively. Recurrent infection may be caused by release of bacteria adherent to biofilm. No similar cases have been reported.

**Conclusions:** Our case report suggests that in patients with previous cranioplasty MRSA infection, risks of recurrence are possible despite apparent appropriate prophylactic antibiotics. New mechanisms to prevent biofilm adherence such as anti-adhesive agents may be of benefit in future attempts.

**1175: CODING COMORBIDITIES IN MAXILLOFACIAL SURGERY – AN ASSESSMENT OF ACCURACY**

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**Aims:** Clinical coding is a complicated but important process. Professional coders rely on information from medical notes to generate a final Human Resource Group (HRG) which then reflects the final payment for a patient episode.

To assess accuracy of coding, we aimed to compare HRG's generated by coding personnel to those generated by a clinician from reviewing the medical notes with regards to medical comorbidities.

**Methods:** A retrospective study of 25 maxillofacial inpatients over 4 weeks. Original patient HRG's and comorbidities were supplied by the coding department. The medical comorbidities were then recorded by a clinician for the same 25 patients using an electronic database. New HRG's were then generated to assess for differences in the final HRG as a result of the clinician recording comorbidities.

**Results:** Recoding by clinicians resulted in 7 (25%) changes to the final HRG, 13 codes added (52%) and 7 changes to comorbidity codes

amongst the 25 patients. This resulted in a financial loss for the hospital.

**Conclusions:** Clinicians need to be more accurate in recording patient comorbidities in order to allow professional coders to process more accurate HRG's and generate the correct financial payment. The audit is ongoing and more results will become available.

**1379: TEMPOROMANDIBULAR JOINT REPLACEMENT SURGERY: A SINGLE SURGEON SERIES IN THE WEST OF SCOTLAND**

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**Aim:** It is acknowledged that the evidence for the long-term efficacy and safety of total prosthetic replacement of the temporomandibular joint (TMJ) is inadequate. It is recommended individual units should audit outcomes against national guidelines, and use the process to inform patients during management and consent for the procedure.

**Method:** A retrospective casenote audit of 39 patients, who had undergone total prosthetic replacement of their TMJ, between 2004 - 2012 by a single surgeon, was carried out using the standardised British Association of TMJ Surgeons dataset.

**Results:** This study comprised 18 bilateral and 21 unilateral TMJ replacements (total=57). The commonest preceding diagnosis was osteoarthritis 38% (n=15). The main symptom prior to replacement was pain (n=20). For all cases, the Walter Lorenz Biomet System was used. All patients gave consent based on the NICE guidelines. The main early complications were facial nerve weakness (n=16), skin numbness (n=11), bleeding (n=4), infection (n=3) and dislocation (n=2). Length of stay ranged from 1-13 days (mean=5.4 days).

**Conclusions:** It is a requirement to validate this relatively recent treatment option and compare outcomes with national standards, allowing an informed judgment of outcomes. The results from this unit are in keeping with provisional findings from the national reports.

**1403: A PARADIGM SHIFT IN THE TREATMENT OF MANDIBULAR HYPOPLASIA**

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**Aim:** Mandibular hypoplasia includes an associated dental overbite and overjet. Modifications of classical surgical techniques have yet to address universal correction of this hypoplasia in three dimensions ie: breadth, width and height.

We elaborate on a novel surgical technique combined with a patented distractor, which allows correction of mandibular hypoplasia. The orthodontic timing and pattern for this technique is unique in comparison to other forms of classical orthognathic surgery.

**Method:** A bespoke mandibular distractor (designed by the senior author) is placed on the body of the mandible with vertical osteotomies. The distractor is activated and the distraction callus allowed to mature. 3D Conebeam CT is used to analyse the 3D changes after surgery and prior to removal of distractors.

**Results:** At time of abstract submission we have included data of 12 patients. Average age at operation: 168 mths (Range: 140-203 months). Average time with distractors: 37 days (Range: 1-64 days). Average distraction per side: 10.25 mm (Range: 4.5-14.5 mm). Average improvement to ANB post-distraction = 6.9 degrees (Range: 29.7- 1.4). A series of pre and postoperative photographs and CT scans is presented.

**Conclusions:** This technique seeks to challenge existing paradigms of clinical treatment of mandibular hypoplasia.

**1491: AN ANALYSIS OF NON-EMERGENCY REFERRALS FOR MID-FACE FRACTURES TO THE WEST OF SCOTLAND REGIONAL ORAL AND MAXILLOFACIAL SURGERY OUT-PATIENT DEPARTMENT**

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**Aims:** To review the accuracy of the referring diagnosis in relation to non-urgent suspected mid-face fractures to the regional West of Scotland Oral and Maxillofacial Surgery Unit from accident and emergency departments.

**Methods:** A retrospective review of 255 consecutive OMFS out-patient trauma clinic patients referred from Accident and Emergency departments was undertaken.